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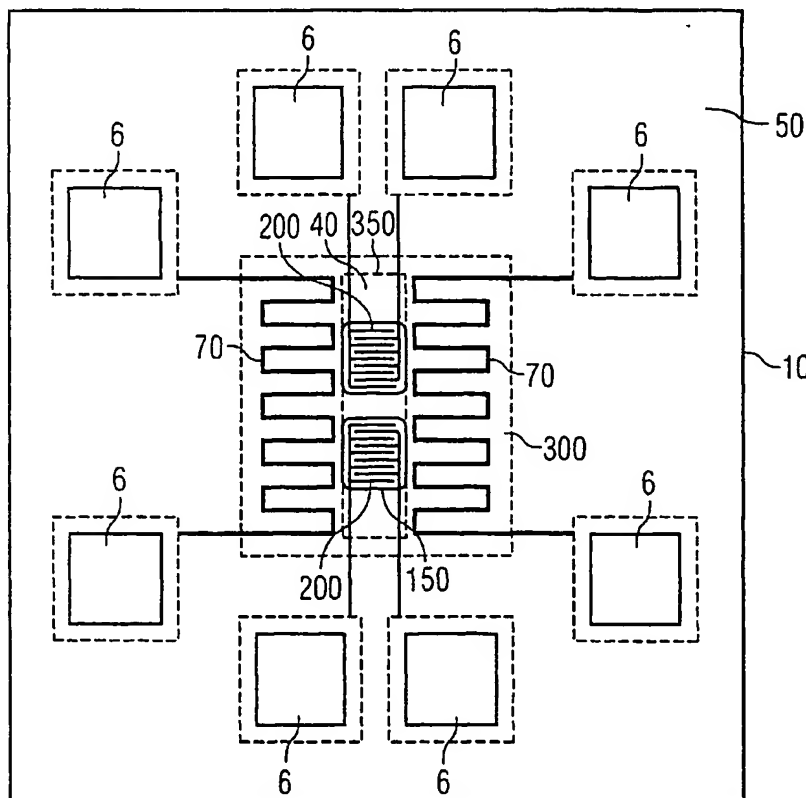
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[Fortsetzung auf der nächsten Seite]

(54) Title: MICROMECHANICAL COMPONENT

(54) Bezeichnung: MIKROMECHANISCHES BAUELEMENT



(57) Abstract: The invention relates to a micromechanical component comprising a substrate (10) and a covering layer (40) which is applied thereon. A porous material is provided under the covering layer (40) in an area (30; 30') which is mechanically supporting and thermally insulating. A heating device (70) is provided on the covering layer (40) for the heating thereof, above the area (30; 30'), and a detection device, (200, 200') for detecting electrical characteristics of a heated medium (150) disposed above said area (30; 30'), is arranged above the area (30; 30') on the covering layer (40).

(57) Zusammenfassung: Die Erfindung schafft ein mikromechanisches Bauelement mit einem Substrat (10) und einer auf dem Substrat (10) aufgetragenen Deckschicht (40), wobei unterhalb der Deckschicht (40) ein die Deckschicht (40) mechanisch unterstützender und thermisch isolierender

Bereich (30; 30') aus porösem Material vorgesehen ist. Auf der Deckschicht (40) ist eine Heizeinrichtung (70)

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## INTERNATIONAL SEARCH REPORT

Int lonal Application No

PCT/DE 02/02480

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G01N27/18 G01N27/12 B81B3/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G01N B81B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	MACCAGNANI P ET AL: "THICK POROUS SILICON THERMO-INSULATING MEMBRANES" SENSORS AND MATERIALS, SCIENTIFIC PUBLISHING DIVISION OF MYU, TOKYO, JP, vol. 11, no. 3, 1999, pages 131-147, XP008001539 ISSN: 0914-4935	1,2,5-9
Y	abstract; figure 1 page 133-138	1-9
Y	US 5 659 127 A (SHIE JIN-SHOWN ET AL) 19 August 1997 (1997-08-19) abstract column 5, line 43 -column 7, line 18 --- -/--	1-9



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## \* Special categories of cited documents:

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Date of the actual completion of the international search

22 October 2002

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## INTERNATIONAL SEARCH REPORT

Int'l Application No

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 464 966 A (SUEHLE JOHN S ET AL) 7 November 1995 (1995-11-07) abstract; figure 5 column 6, line 19-37 ----	1-3,6-9
Y	WO 98 50763 A (NASSIOPOULOU ANDROULA G ;NCSR DEMOKRITOS (GR); KALTSAS GRIGORIS (G) 12 November 1998 (1998-11-12) abstract; claim 3 page 1-3 ----	1-3,6-9
A	LAMMEL G ET AL: "Free-standing, mobile 3D porous silicon microstructures" SENSORS AND ACTUATORS A, ELSEVIER SEQUOIA S.A., LAUSANNE, CH, vol. 85, no. 1-3, 25 August 2000 (2000-08-25), pages 356-360, XP004214496 ISSN: 0924-4247 cited in the application the whole document ----	1-9
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A	EP 0 882 978 A (ST MICROELECTRONICS SRL) 9 December 1998 (1998-12-09) the whole document ----	1-9
A	LANG W ET AL: "POROUS SILICON TECHNOLOGY FOR THERMAL SENSORS" SENSORS AND MATERIALS, SCIENTIFIC PUBLISHING DIVISION OF MYU, TOKYO, JP, vol. 8, no. 6, 1996, pages 327-344, XP000609408 ISSN: 0914-4935 the whole document ----	1-9
A	DE 197 52 208 A (BOSCH GMBH ROBERT) 2 June 1999 (1999-06-02) the whole document -----	1-9